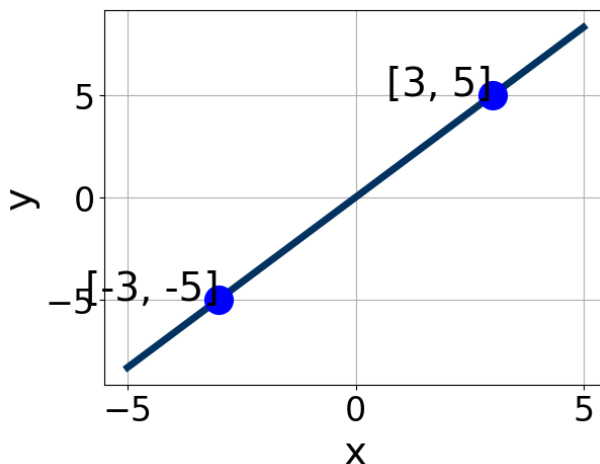


1. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(5, -9) \text{ and } (-3, 11)$$

- A.  $m \in [-5.5, 1.5]$   $b \in [-4.5, 2.5]$   
B.  $m \in [-5.5, 1.5]$   $b \in [-15, -13]$   
C.  $m \in [-5.5, 1.5]$   $b \in [2.5, 4.5]$   
D.  $m \in [1.5, 6.5]$   $b \in [14.5, 23.5]$   
E.  $m \in [-5.5, 1.5]$   $b \in [14, 16]$
- 

2. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-6, -2]$ ,  $B \in [2, 3.6]$ , and  $C \in [-2, 3]$   
B.  $A \in [-1.67, 2.33]$ ,  $B \in [-1.5, -0.4]$ , and  $C \in [-2, 3]$   
C.  $A \in [-1.67, 2.33]$ ,  $B \in [0, 2.7]$ , and  $C \in [-2, 3]$   
D.  $A \in [4, 7]$ ,  $B \in [-3.9, -2.5]$ , and  $C \in [-2, 3]$   
E.  $A \in [4, 7]$ ,  $B \in [2, 3.6]$ , and  $C \in [-2, 3]$
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3. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(-2x - 18) = -19(-9x + 12)$$

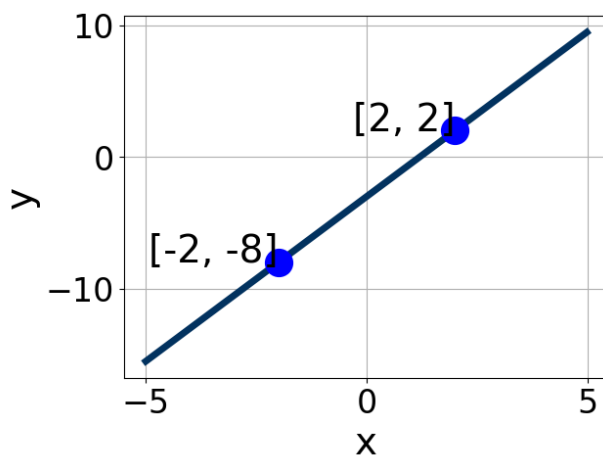
- A.  $x \in [0.54, 0.65]$
  - B.  $x \in [2.15, 2.72]$
  - C.  $x \in [-0.7, -0.54]$
  - D.  $x \in [0.23, 0.52]$
  - E. There are no real solutions.
- 

4. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(-8, 5) \text{ and } (6, -3)$$

- A.  $m \in [-1.48, 0.27]$   $b \in [12.66, 13.75]$
  - B.  $m \in [0.51, 0.74]$   $b \in [-7.37, -5.63]$
  - C.  $m \in [-1.48, 0.27]$   $b \in [-0.63, 0.31]$
  - D.  $m \in [-1.48, 0.27]$   $b \in [0.36, 0.67]$
  - E.  $m \in [-1.48, 0.27]$   $b \in [-9.97, -8.7]$
- 

5. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-2.6, 1.8]$ ,  $B \in [-1.74, -0.89]$ , and  $C \in [1.8, 4]$   
 B.  $A \in [2.5, 8.3]$ ,  $B \in [1.11, 2.52]$ , and  $C \in [-7.9, -4.8]$   
 C.  $A \in [2.5, 8.3]$ ,  $B \in [-2.09, -1.79]$ , and  $C \in [4.8, 8]$   
 D.  $A \in [-5.1, -3.2]$ ,  $B \in [1.11, 2.52]$ , and  $C \in [-7.9, -4.8]$   
 E.  $A \in [-2.6, 1.8]$ ,  $B \in [-0.04, 1.53]$ , and  $C \in [-5.2, -2.6]$

6. Solve the equation below. Then, choose the interval that contains the solution.

$$-14(-15x - 6) = -3(18x - 12)$$

- A.  $x \in [0.31, 0.74]$   
 B.  $x \in [-1.04, -0.76]$   
 C.  $x \in [-0.27, -0.14]$   
 D.  $x \in [-0.53, -0.33]$   
 E. There are no real solutions.

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-3x + 8}{2} - \frac{-8x - 7}{3} = \frac{9x + 6}{4}$$

- A.  $x \in [7.9, 9]$

- B.  $x \in [4.4, 5.4]$
  - C.  $x \in [0.6, 2]$
  - D.  $x \in [0, 0.4]$
  - E. There are no real solutions.
- 

8. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $6x + 7y = 12$  and passing through the point  $(10, -4)$ .

- A.  $m \in [0.16, 1.19]$   $b \in [-13.13, -12.4]$
  - B.  $m \in [-1.07, -0.35]$   $b \in [2.89, 5.54]$
  - C.  $m \in [-1.07, -0.35]$   $b \in [-6.03, -3.72]$
  - D.  $m \in [-1.26, -1.1]$   $b \in [2.89, 5.54]$
  - E.  $m \in [-1.07, -0.35]$   $b \in [-14.4, -13.93]$
- 

9. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 9}{3} - \frac{4x - 4}{7} = \frac{9x + 6}{8}$$

- A.  $x \in [4.62, 5.62]$
  - B.  $x \in [18.28, 21.28]$
  - C.  $x \in [-1.69, 2.31]$
  - D.  $x \in [4.77, 8.77]$
  - E. There are no real solutions.
- 

10. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Perpendicular to  $5x - 7y = 7$  and passing through the point  $(6, 10)$ .

A.  $m \in [-2.2, -1.21]$   $b \in [3, 8]$

B.  $m \in [-1.13, -0.18]$   $b \in [18.4, 19.4]$

C.  $m \in [1.05, 1.97]$   $b \in [0.6, 2.6]$

D.  $m \in [-2.2, -1.21]$   $b \in [18.4, 19.4]$

E.  $m \in [-2.2, -1.21]$   $b \in [-21.4, -16.4]$ 

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